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Department of Energy
Attn Richard Karney or persons documenting comments to FTE

Re: Comments on The Fitted Target Efficacy draft

- 1. This evaluation method qualifies luminaires based on Illuminance, whereas the next Roadway standard (RP8-10) will be recommending LUMINANCE as the first calculation to be performed.
- 2. The TASK IS THE TASK . . . an energy evaluation on luminaires without relating them to the TASK is doomed to fail.
- 3. FTE ignores the light that is "outside the box"
 - a. Streetlighting works as a SYSTEM: light that doesn't fall inside the FTE "box" is given no credit, while some luminaires contribute much to the total illuminance beyond the midpoint between the poles.
 - b. Area Lighting is a system of luminaire locations, often using multiple fixtures on a single pole. The FTE "box" gives no credit to the light on the house-side, which adds substantial illuminance to the distribution from the second luminaire.
- 4. The Uniformity ratios are arbitrary. FTE could eliminate a luminaire that has specific advantages for a specific task. Example: oddly shaped parking lots.
- 5. The intensity distribution of each luminaire defines the AREA, but that particular area may not match the task.
- 6. FTE cannot evaluate multiple-fixture pole locations
- 7. LED luminaires perform differently at different Spacing-to-Mounting height ratios. If the S/MH is too "short", overlap of main beams can reduce contrast. FTE can't account for this at all.
- 8. LED luminaires perform differently at different mounting heights, especially higher mounting heights.
- IES classification types are only considered very generally by any experienced lighting professional. They don't need to be FIXED. FTE is overkill
- 10. Different products can come out with the same FTE number but perform very differently from each other. It does not help the designer narrow the field . . . and Could very easily eliminate a good "tool" for certain applications
- 11. Since this "test" is only applicable to SSL products, it does not help the designer evaluate SSL vs HID vs Induction vs any other technology

In summary, we don't need another metric for determining the suitability of a lighting product, or one lighting product over another. This metric will be used foolishly to eliminate good products, and takes the overall design responsibility out of the designer's hands.



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The algorithms appear to be generated by people obsessed with numbers in their absolute form, using them in a technology full of "trade-offs" where the real need is intelligent managements of these trade-offs. It's a short-cut that ignores most of what lighting designers have learned about the complex nature of lighting applications.

Sincerely

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